

-34-

ABSTRACT

There is disclosed a method for selectively binding micromolecules having a lysine functionality comprising the steps of: providing a sample containing one or more species of macromolecules, each having a lysine functionality; providing a binding reagent having the formula X-NH-C(=NH)-OR or X-L-NH-C(=NH)-OR where X is an affinity label that selectively binds to a capture reagent, R is a residue group, and L is a linker moiety; introducing the binding reagent to the sample so as to effect a guanidination reaction between the binding reagent and said one or more species of macromolecules, thereby producing one or more affinity label containing homoarginine derivatives; optionally modifying the affinity label containing homoarginine derivatives to produce further affinity label containing homoarginine derivatives; and capturing affinity label containing homoarginine derivatives using the capture reagent that selectively binds X.